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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,535	08/05/2003	Henry Frank Gasbarro	NG(MS)-6619	6064

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EXAMINER

BROADHEAD, BRIAN J

ART UNIT	PAPER NUMBER
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3661

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/634,535

Applicant(s)

GASBARRO, HENRY FRANK

Examiner

Brian J. Broadhead

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-14 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) 8-14 and 16-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on 12-20-2006 is acknowledged.

Claim Objections

2. Claims 4 and 5 are objected to because of the following informalities: Both claims recite "the personal digital assistant" while only a "handheld computing device" has been previously recited. It has been assumed that the PDA is meant to be a "handheld computing device". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith US2006/0241865, in view of Sridharan et al., US2003/0017646A1.
5. Smith discloses a GPS module that produces locations information associates with the position of the module and handheld computing device (203); an L-band transceiver that broadcasts the location information to a satellite relay and receives location information from the at least one portable communications device via the satellite relay in paragraphs 44 and 86, the disclosure of satellite communications would include L-band frequencies; a processing unit that provides messages to the L-band

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transceiver and updates a display associated with the tablet computer assembly according to the received location information and the location information produced at the GPS module in paragraphs 47 and 81, and an internal power supply is inherent. Smith does not disclose an electrically conductive enclosure around the L-band transceiver (Faraday cage) to reduce EM interference and the Faraday cage being configured as a heat sink to draw away heat away and the module is easy to remove from the handheld computing device. Sridharan et al. teach Faraday cage around electronics to reduce EM interference and the Faraday cage being configured as a heat sink to draw away heat away in paragraphs 7 and 9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shielding of Sridharan et al. in the invention of Smith because such modification would the electromagnetic interference that can occur with a large number of electronic circuits are placed in close proximity to each other as described in paragraph 2 of Sridharan et al. Smith and Sridharan et al. do not disclose that the module is easy to remove from the handheld computing device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to separate the module from the handheld or Smith, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art (Nerwin v. Erlichman, 168 USPQ 177, 179).

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith US2006/0241865, in view of Sridharan et al., US2003/0017646A1 as applied to claim 1 above, and further in view of Gilbert et al., US2003/0032426.

7. Smith discloses the limitations as set forth above. Smith does not disclose a single antenna to facilitate the transmission and reception of the messages by the L-band transmitter and the GPS module. Gilbert et al. teaches using one antenna for both the GPS and L-band transceiver in paragraph 53. It would have been obvious to one of ordinary skill in the art to use one antenna instead of two because it would reduce costs. The trade off would just be that data transmissions would be restricted some.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith US2006/0241865, in view of Sridharan et al., US2003/0017646A1, and further in view of Gilbert et al., US2003/0032426 as applied to claim 2 above, and further in view of Saunders et al., US2005/0162334.

9. Smith, Sridharan et al., and Gilbert disclose the limitations as set forth above. They do not disclose using a quadrifilar helix antenna (QHA). Saunders et al. teach using a QHA in paragraph 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a QHA because they can be small and compact, and are relatively insensitive to the effects of handling as disclosed in paragraph 2 of Saunders.

10. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, US2006/0241865, in view of Sridharan et al., US2003/0017646A1, as applied to claim 1 above, and further in view of Bielby, "Xilinx".

11. Smith and Sridharan et al. disclose the limitations as set forth above. Smith does not disclose an I/O board that translates communication between the L-band transceiver and the handheld computing device and the internal power supply (which is inherent in

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Smith) being connected to the communications module. Bielby teaches the I/O board used is the ISA or PCI bus of the computer. An ISA and PCI bus include power. It would have been obvious to one of ordinary skill in the art to use the ISA or PCI bus along with their associated control boards because such modification would be cheaper and eliminate the need to an case and external power supply as discloses by Bielby on page 5.

12. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, US2006/0241865, in view of Sridharan et al., US2003/0017646A1, as applied to claim 1 above, and further in view of Lada et al., 2005/0114553.

13. Smith and Sridharan et al. disclose the limitations as set forth above. They do not disclose a battery that is attachable to the internal power source or battery of the handheld computing device. Lada et al. teaches a battery that is attachable to the internal power source or battery of the handheld in paragraphs 40-41. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the battery of Lada et al. in the invention of Smith and Sridharan et al. because such modification would extend the life of the first battery as stated in Lada et al.

Response to Arguments

14. Applicant's arguments with respect to claims 1 through 6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Broadhead whose telephone number is 571-272-6957. The examiner can normally be reached on Monday through Friday.

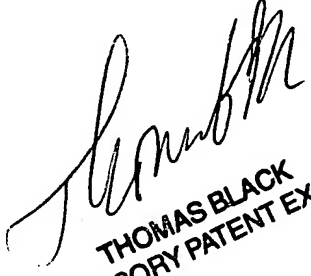
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



BJB



THOMAS BLACK
SUPERVISORY PATENT EXAMINER